DEPARTMENT OF AGRICULTURE

IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP

Bill Northey, Secretary of Agriculture

Conservation Practices and the Iowa Storm Events of 2008

2008 Flood Damage Assessment Survey—Results

Estimated acres suffering severe damage

20 tons per acre soil erosion: 2,284,000 ac. Bottomland scouring: 636,000 ac.

Percent of practices that operated properly

Grass Waterways 55%
Terraces 83%
Grade Stabilization Structures/ Water and 90%

Sediment Control Basins

Number of conservation practice sites needing repair

Grassed Waterways 12,157
Terraces 8,137
Water and Sediment Control Basins 3,375
Grade Stabilization Structures 800

Key Observations of Field-Level Conservationists

- Crop residues reduced soil erosion and slowed runoff
- Long term no till showed fewer signs of erosion and runoff than any system using tillage
- Fields with combinations of two or more conservation practices performed better than fields with a single practice
- Practices installed and maintained to NRCS standards and specifications generally functioned and operated as designed and withstood the storms
- Maintenance of conservation practices, particularly waterways, was important to their success.

Lessons Learned – Direction for the Future

- 1. Consider "hydrologic footprint" of all actions
- 2. Propose new initiatives for water storage & infiltration
- 3. Accelerate adoption of no-till/residue management for erosion, soil quality, & infiltration
- 4. Expand "conservation systems approach"
- 5. Increase focus on practice maintenance
- 6. Renewed focus on planning at the farm/watershed level

Build a "Culture of Conservation"!